
CARLA RESTREPO

Department of Biology
NCN-Fase I, Room 136
University of Puerto Rico-RP
San Juan, Puerto Rico, 00931-3360

telephone: (787) 764-0000 x 4879
fax: (787) 764-2610
e-mail: crestre@hpcf.upr.edu
www: tselab.uprrp.edu

EDUCATION

- Ph.D. 1995. University of Florida, Edges, fruits, frugivores, and seed dispersal in a Neotropical Montane Forest. Advisor: Douglas Levey.
M.Sc. 1990. University of Florida, Cooperative breeding in *Semnornis ramphastinus* (Capitonidae), a frugivorous bird. Advisor: Peter Feinsinger, Co-advisor: Douglas Levey.
B.Sc. 1984. Universidad del Valle, Colombia, *Seed dispersal of mistletoes by birds*¹. Advisor: Humberto Alvarez-Lopez.

POSITIONS

- Associate Professor, University of Puerto Rico-Río Piedras, PR, 2008-present.
Assistant Professor, University of Puerto Rico-Río Piedras, PR, 2001-2008.
Research Assistant Professor, University of New Mexico, NM. 2000-2001.
Postdoctoral Research Fellow, University of New Mexico, NM (with Bruce Milne and Jim Brown). 1997-1999.
Visiting Scholar, Stanford University, CA (with Peter Vitousek). 1996-1997.
Research Associate, University of Florida, FL (with Crawford. S. Holling). 1996.
Research Associate, Observatorio Sismológico del Suroccidente de Colombia-UV, Colombia, 1996-2005.
Graduate Teaching Assistant, Department of Zoology, University of Florida, FL. 1990-1995.
Graduate Research Assistant, Department of Zoology, University of Florida, FL. 1988.
Research Coordinator, Reserva Natural La Planada, FES, Colombia 1992-1993.
Research Associate, Sociedad Vallecaucana de Ornitología, Colombia. 1986-1988.
Ecologist, Centro de Datos para la Conservación-CVC, Colombia. 1984-1986.
Undergraduate Teaching Assistant, Departamento de Biología, Universidad del Valle, Colombia. 1980-1981.

FELLOWSHIPS AND AWARDS

- National Science Foundation Minority Postdoctoral Research Fellowship. 1996-1998.
College of Liberal Arts and Sciences Dissertation Fellowship, University of Florida, FL. 1995.
Department of Zoology Travel Award, University of Florida, FL. 1995.
Graduate School Travel Award, University of Florida, FL. 1993.
Marcia Tucker Travel Award, American Ornithologists' Union, USA. 1990.
National Science Foundation Minority Graduate Fellowship. 1989-1992.
Jessie Smith Noyes Fellowship to attend Organization for Tropical Studies course. 1988.

HONORS

- Elective Member of the American Ornithologist's Union. 2010

GRANTS

- National Science Foundation, DEB Ecosystem Studies, Collaborative Research-Landsliding, land-use change, and carbon dynamics in a Central American mountainscape. 2009-2012 (PI), \$401,491.
Planet Action. The Contribution of Landsliding and Deforestation to Land-cover Change. 2009 (PI)
Planet Action. Patterns and Mechanisms of Invasion by Exotic Vines in the Tropical Island of Puerto Rico. 2009 (Co-PI)
National Science Foundation, GEO-EAR, SGER: Development of a landscape approach for understanding the contribution of landsliding to carbon budgets: Using the Rio Jones of the Sierra de Las Minas, Guatemala as a test watershed. 2009-2010 (PI), \$40,000.

¹ In italics translations from Spanish

- FIPI-Deanship of Graduate Studies and Research-University of Puerto Rico-Rio Piedras. Resilience thinking for the sustainable management of the Rio Grande de Arecibo watershed: The use of a spatially explicit framework for understanding responses to perturbations. 2008-2010 (PI), \$50,000.
- U. S. Department of Agriculture, International Institute of Tropical Forestry, Convening the First Symposium-Workshop on Landslide Ecology-A Perspective from Tropical Mountains, Kunming, China, July 2006 (PI), \$3,000
- National Science Foundation, GEO-EAR, Convening the First Symposium-Workshop on Landslide Ecology-A Perspective from Tropical Mountains, Kunming, China, July 2006 (PI), \$5,000
- Centro de Recursos para la Ingeniería y las Ciencias-Universidad de Puerto Rico, NSF-PR-EPSCoR, Landslides and their contribution to land cover change: Implications for local, regional, and global carbon budgets (PI), 2005-2007, \$200,000
- FIPI-UPR-RP, Multimodality in the distribution of body size and complex allometries in animal assemblages: An ecological puzzle and its implication for conservation (PI). 2003-2005, \$25,000
- National Science Foundation, HRD-CREST-Center for Tropical Applied Ecology and Conservation-UPR-RP (co-PI; PI E. Cuevas). 2002-2007, \$5,000,000
- National Science Foundation, DEB, Self-organization of Semi-Arid Landscapes: Tests of Optimality Principles (Co-PI; PI, B. Milne). 2000, \$674,911
- Fondo para la Protección del Medio Ambiente José Celestino Mutis, *Seed dispersal in tropical mountains affected by large-scale natural disturbances*. 1995, \$10,000.
- Wildlife Conservation Society, Tinker Field Research Competition, Tropical Conservation and Development Program-University of Florida, Fundación para la Promoción de la Investigación y la Tecnología-Banco de la República, Edge Effects on Plant-Animal Interactions in Montane Neotropical Forests, 1991-1993, \$20,000.
- Fundación para la Promoción de la Investigación y la Tecnología-Banco de la República, Frank M. Chapman Memorial Grant, and Douroucoulí Foundation, Social organization and habitat utilization by *Semnornis ramphastinus* (Aves: Capitonidae). 1988-1989, \$9,000.
- Sigma XI Grant-in-Aid of Research, Male parental care in *Semnornis ramphastinus*. 1988, \$300.
- Fondo para la Protección del Medio Ambiente José Celestino Mutis, Fundación para la Educación Superior, Hummingbird Society, International Council for Bird Preservation-Pan American Section, Natural History of *Semnornis ramphastinus* (Aves: Capitonidae), a vulnerable species. 1986-1987, \$5,000.
- Fundación Natura and Corporación Autónoma Regional del Cauca, *Threatened plant communities in the Valle del Cauca, Colombia: Changes between 1950-1980*. 1986, \$10,000.
- Universidad del Valle, *Seed dispersal of mistletoes by birds*. 1982, \$300.

PUBLICATIONS (excluding abstracts)

- Xu, L., E. J. Bedrick, T. Hanson, and **C. Restrepo**. Statistical tools for identifying modality in body mass distributions. *Journal of Data Science* (accepted)
- Sutton, L. and **C. Restrepo**. 2013. Natural disasters, diverse economy and livelihoods in the Sierra de Las Minas, Guatemala. *Journal of Latin American Geography* 12: 137-164.
- Delgado, D., A. Galindo, M.E. Perez, T. Giray, and **C. Restrepo**. 2012. Forecasting the influence of climate change on agroecosystem services: Impacts on honey yields in a small-island developing state. *Psyche: A Journal of Entomology*, doi:10.1155/2012/951215.
- Ramos-Scharron, C., E. Castellanos, and **C. Restrepo**. 2012. The role of shallow landslides in the downslope transfer of organic matter and its implications on the residence time of carbon in a tropical mountain system. *Journal of Geophysical Research - Biogeosciences* 117, G03016. doi:10.1029/2011JG001838
- Xu, L., T. Hanson, E. Bedrick, and **C. Restrepo**. 2010. Hypothesis tests on mixture model components with application to ecological and agricultural data. *Journal of Agricultural, Biological, and Environmental Statistics* 15:308–326. DOI: 10.1007/s13253-010-0020-z
- Restrepo, C.**, L. Walker, A. Shiels, R. Bussman, L. Claessens, S. Fisch, P. Lozano, G. Negi, L. Paolini, G. Poveda, C. Ramos-Scharron, M. Richter, E. Velazquez. 2009. Landsliding and its multi-scale influence on mountainscapes. *BioScience* 59:685-698.
- Restrepo, C.** and N. Arango. 2008. Discontinuities in the Geographical Range Size of North American Birds and Butterflies: A Biogeographical Test of the Textural Discontinuity Hypothesis. Pages 101-135 in C. Allen, G. Peterson, and C. S. Holling (eds.). *Cross-scale Structure and Discontinuities in Ecosystems and other Complex Systems*. Columbia University Press, New York, New York, US.
- Delgado-Acevedo, J. and **C. Restrepo**. 2008. The effect of habitat loss on body size, allometry, and bilateral asymmetry in two *Eleutherodactylus* species of Puerto Rico. *Conservation Biology* 22:773-782 Doi: 10.1111/j.1523-1739.2008.00930.x

- Allen, A., B. T. Milne, W. Pockman, A. Tyler, and **C. Restrepo**. 2008. Allometry, growth, and population regulation of the desert shrub *Larrea tridentata*. *Functional Ecology* 22:197-204. DOI: 10.1111/j.1365-2435.2007.01376.x
- Acevedo, M. and **C. Restrepo**. 2008. Land-use change and the large-scale organization of bird assemblages in the island of Puerto Rico. *Diversity and Distributions* 14:114-122.
- Cuervo, A. and **C. Restrepo**. 2007. Assemblage and population-level consequences of forest fragmentation on bilateral asymmetry in tropical montane birds. *Biological Journal of the Linnean Society* 92:119-133.
- Allen C. R., A. S. Garmestani, T. D. Havlicek, P. A. Marquet, G. D. Peterson, **C. Restrepo**, C. A. Stowe, B. Weeks. 2006. Keystone processes and ecological organization: Evaluating alternative explanations for patterns in body size distribution. *Ecological Letters* 9:630-643. doi: 10.1111/j.1461-0248.2006.00902.x
- Restrepo, C.** and N. Alvarez. 2006. Landslides and their impact on land-cover in the mountains of Mexico and Central America. *Biotropica* 38:446-457. DOI: 10.1111/j.1744-7429.2006.00178.x
- Restrepo, C.**, P. Vitousek, and P. Neville. 2003. Landslides significantly alter land cover and the distribution of biomass: An example from the Ninole ridges of Hawai'i. *Plant Ecology* 166:131-143. DOI: 10.1023/A:1023225419111
- Milne, B. T., V. K. Gupta, and **C. Restrepo**. 2002. A scale invariant infiltration law that couples plants, water, and energy. *EcoScience* 9:191-199.
- Brown, J. H., V. K. Gupta, B-L. Li, B. T. Milne, **C. Restrepo**, and G. B. West. 2002. The fractal nature of nature: Power laws, ecological complexity, and biodiversity. *Philosophical Transactions of the Royal Society of London Series B-Biological Sciences* 357:619-629. doi: 10.1098/rstb.2001.0993
- Restrepo, C.**, S. Sargent, D. Levey, and D. Watson. 2002. The role of vertebrates in the diversification of New World mistletoes. Pages 83-98, in D. J. Levey, W. R. Silva, and M. Galetti, eds. *Seed Dispersal and Frugivory: Ecology, Evolution and Conservation*. CABI Publishing, Wallingford, Oxfordshire, UK.
- Restrepo, C.** 2002. *Frugivory: More than a feeding habit*. in M. Guariguata and G. Kattan, editors. *Tropical Ecology*. CATIE, Costa Rica.
- Restrepo, C.** and P. Vitousek. 2001. Landslides, alien species, and the diversity of a Hawaiian montane mesic ecosystem. *Biotropica* 33:409-420. DOI: 10.1111/j.1744-7429.2001.tb00195.x
- Restrepo, C.** and A. Vargas. 1999. The influence of treefall gaps and anthropogenic edges on seed germination and seedling growth of two understory Neotropical shrubs. *Oecologia* 119:419-426
- Restrepo, C.**, N. Gómez, and S. Heredia. 1999. Anthropogenic edges, treefall gaps, and fruit-frugivore interactions in a Neotropical montane forest. *Ecology* 80:668-685. doi: 10.1890/0012-9658(1999)080[0668:AETGAF]2.0.CO;2
- Restrepo, C.** and N. Gómez. 1998. Responses of understory birds to anthropogenic edges in a Neotropical cloud forest. *Ecological Applications* 8:170-183.
- Restrepo, C.** and M. Mondragón. 1998. Cooperative breeding in the frugivorous Toucan Barbet (*Semnornis ramphastinus*: Capitoninae: Ramphastidae). *The Auk* 115:4-15.
- Restrepo, C.**, L. M. Renjifo, and P. Marples. 1997. Frugivorous birds in fragmented Neotropical montane forests: Landscape pattern and body mass distribution. Pages 171-189, in W.F. Laurance and R. O. Bierregaard, Jr., editors. *Tropical Forest Remnants: Ecology, Management, and Conservation of Fragmented Communities*. The University of Chicago Press, Chicago, IL.
- Laurence, W. F., R. O. Bierregaard Jr., C. Gascon, R. K. Dirham, A. P. Smith, A. J. Lynam, V. M. Viana, T. E. Lovejoy, K. E. Sieving, J. W. Sites Jr., M. Andersen, M. D. Tocher, E. Kramer, **C. Restrepo**, and C. Moritz. 1997. Tropical forest fragmentation: Synthesis of a diverse and dynamic discipline. Pages 502-514, in W.F. Laurance and R. O. Bierregaard, Jr., editors. *Tropical Forest Remnants: Ecology, Management, and Conservation of Fragmented Communities*. The University of Chicago Press, Chicago, IL.
- Bierregaard, R. O. Jr., W. F. Laurance, J. W. Sites Jr., A. J. Lynam, R. K. Dirham, M. Andersen, C. Gascon, M. D. Tocher, A. P. Smith, V. M. Viana, T. E. Lovejoy, K. E. Sieving, E. A. Kramer, **C. Restrepo**, and C. Mortiz. T. 1997. Key priorities for the study of fragmented tropical ecosystems. Pages 515-526, in W.F. Laurance and R. O. Bierregaard, Jr., editors. *Tropical Forest Remnants: Ecology, Management, and Conservation of Fragmented Communities*. The University of Chicago Press, Chicago, IL.
- Martínez del Río, C. and **C. Restrepo**. 1993. Ecological and behavioral consequences of digestion in frugivorous animals. *Vegetatio* 107/108:205-206.
- Restrepo, C.** y A. Duque. 1992. *Plant communities of the Llano de Paletará paramo, Cordillera Central, Colombia*. *Caldasia* 17:21-34.
- Restrepo, C.** y L. G. Naranjo. 1992. *Changes in the distribution of aquatic ecosystems and birds in the Valle del Cauca, Colombia, between 1950-1980. Proceedings of the III Neotropical Ornithological Congress, Cali, Colombia*.
- Restrepo, C.** 1987. *Seed dispersal of five species of mistletoes by birds*. *Humboldtia* 1: 6-16.

- Restrepo, C.** and A. S. H. Breure. 1987. *Drymaeus zingarensis*, a new land-snail from Colombia (Gasteropoda: Pulmonata: Bulimulidae). *Basteria* 51:141-144.
- Kattan, G., **C. Restrepo** y M. Giraldo. 1984. *Structure and composition of a tropical cloud forest in the Cordillera Occidental, Valle del Cauca, Colombia*. *Cespedesia* 13:23-43.
- Restrepo, C.**, M. Giraldo y F. J. Borrero. 1983. *Land-snails of the interandean Cauca dry forest*. *Cespedesia* 12:111-124.

Manuscripts in review

- Delgado D. L., J. Figueroa and **C. Restrepo**. Vine assemblages in a tropical island are diverse: Predicting invasiveness from multiple traits (submitted to *Biodiversity and Distributions*)
- McAdams, B. C., M. Langlois, L. K. Weavers, **C. Restrepo**, and A. E. Carey. Evidence for filtration as an effective method to preserve dissolved organic carbon concentrations during storage. (submitted to *Limnology and Oceanography: Methods*)
- Monmany, A. C., M. Yu, C. Restrepo and J. K. Zimmerman. How are landscape complexity and vegetation structure related across an agricultural frontier in the subtropical Chaco, NW Argentina? (submitted to *Journal of Arid Environments*)

Manuscripts in preparation

- Cuervo, A. M. and **C. Restrepo**. Testing the phenotypic consequences of habitat fragmentation on five Neotropical montane birds (to be submitted to *BMC Ecology*).
- Trierweiler, A., S. Welch, **C. Restrepo**, and A. Carey. The effect of landslide disturbance and watershed scale on fluvial chemical yields. (to be submitted to *Water Resources Research*)
- Heredia, S., E. Bruna, H. Vasconcelos, M. E. Perez, and C. Restrepo. Forest fragmentation and the spatial distribution of an ant-plant mutualism in Central Amazonia (to be submitted to *Ecology*)
- Sanchez, X., R. Torres, J. Gonzalez, F. Axelrod, and C. Restrepo. Mistletoe distribution in Puerto Rico: The contribution of climate and hosts to island-wide patterns of species richness (to be submitted to *Journal of Biogeography*)
- Restrepo, C. and A. Cuervo. Body size serves to fingerprint bird communities in fragmented habitats (to be submitted to *Nature*)
- Muñoz, M., M. Caraballo, and C. Restrepo. Land-cover change and patterns of tree infection by the mistletoe *Dendropemon caribaeus* (Loranthaceae) in northern Puerto Rico (*Landscape Ecology*)
- Restrepo, C., J. D. Daza, and J. Delgado-Acevedo. Land-use change, skeletal development, and abnormalities in two *Eleutherodactylus* frogs of Puerto Rico.
- Villanueva, L., J. Delgado-Acevedo, M. I. Herrera, F. Castro, and C. Restrepo. Body size in neotropical amphibian communities and its role in predicting their conservation status.

Other

- Restrepo, C.**, P. Salaman, y Andrés Cuervo. 2002. *Pipreola chlorolepidota*. en: Renjifo, L. M., A. M. Franco-Maya, J. D. Amaya-Espinel, G. Kattan y B. López-Lanús (eds.). 2002. Libro rojo de aves de Colombia. Serie Libros Rojos de Especies Amenazadas de Colombia. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt y Ministerio del Medio Ambiente. Bogotá, Colombia
- Restrepo, C.** 1993. *The Colombian Chocó region: A world to discover, a world to preserve*. Pages 811-815, in P. Leyva, editor. Colombia: Pacífico. Fondo FEN, Bogotá, Colombia.
- Restrepo, C.** and M. Mondragón. 1988. The Toucan Barbet *Semnormis ramphastinus*, a threatened bird species. *Trochilus* 9:116-117 (in German)

INVITED TALKS

- Restrepo, C.** 2013. Sustainability - A crossroad between research, education, and action. Symposium - The UPI: In Search of Sustainability - La UIPI: En Búsqueda de la Sustentabilidad. University of Puerto Rico-Rio Piedras, San Juan, PR, September 2013.
- Restrepo, C.** 2013. Deslizamientos de tierra y presupuestos de carbon en montañas tropicales: Implicaciones para la provision de servicios ambientales. Universidad San Carlos de Guatemala, Ciudad de Guatemala, Guatemala, August 2013.

- Restrepo, C.** 2013. Mountains, natural hazards, and livelihoods - The story of Santa Rosalia in the Sierra de Las Minas of Guatemala in three acts. Department of Environmental Sciences Seminar Series, University of Puerto Rico-Rio Piedras, San Juan, PR, March 2013.
- Restrepo, C.** and M. G. Dominguez. 2012. Women gone wild: jungle fieldtrip experiences in Guatemala and Amazonia. Department of Biology Seminar Series, University of Puerto Rico-Rio Piedras, San Juan, PR, December 2012.
- Restrepo, C.** 2012. Landslides and carbon budgets in tropical mountains: Implications for the provision of ecosystem services. School of Earth Sciences, Ohio State University, Columbus, OH, October 2012.
- Restrepo, C.** 2012. Legacies of Socio-economic Transitions on the Structure and Function of a Tropical Drainage Basin: Resilience and Sustainability Implications. Quantifying sustainability in Puerto Rico - A scientific discussion. EPA-Research Branch, San Juan Puerto Rico, June 2012
- Restrepo, C.** 2011. Legacies of Socio-economic transitions on the structure and function of a tropical drainage basin: Resilience and sustainability implications. Seminar Program Environmental Sciences, University of Puerto Rico-Rio Piedras. October 2011.
- Restrepo, C.** 2011. Ensamblajes de enredaderas en paisajes post-agrícolas tropicales. Departamento de Biología, Universidad de Antioquia, Medellín, Colombia, September 2011.
- Restrepo, C.** 2011. Deslizamientos de tierra y presupuestos de carbono en montañas tropicales: Implicaciones para la provisión de servicios ambientales bajo escenarios de cambio climático. Asociación Colombiana de Ciencias Biológicas, Medellín, Colombia, September 2011.
- Restrepo, C.** 2010. Landslides and carbon budgets in the Sierra de Las Minas of Guatemala: Implications for the provision of environmental services in tropical montane ecosystems. Simposio de Biodiversidad y Servicios Ambientales. Guatemala, Guatemala, November, 2010.
- Restrepo, C.** 2010. Landslides and their role in the carbon cycle: The Sierra de Las Minas of Guatemala as a model system. Simposio Internacional – Ecosistemas y Cambio Climático en el Contexto del Cambio Global en el Neotrópico. Medellín, Colombia, May 19-20, 2010
- Restrepo, C.** and D. Delgado. 2009. Large-scale patterns of diversity and productivity in the island of Puerto Rico: Integration of large databases with spatially explicit information. XXVIII-Simposio Flora Fauna del Caribe, Universidad de Puerto Rico-Humacao. April 14, 2009.
- Restrepo, C.** 2009. Skeletal abnormalities in two *Eleutherodactylus* species: A hidden effect of land-cover change on species diversity. International Institute of Tropical Forestry Seminar Series, San Juan, Puerto Rico.
- Restrepo, C.** [speaker], J. Gonzalez García, J. C. Castro Hernancez, and Saul Hernandez Bezares. 2008. Landslides, natural protected areas and the long-term management of mountainscapes: emerging challenges from the study of the El Triunfo Biosphere Reserve, Chiapas, Mexico. The First World Landslide Forum, Kyoto, Japan.
- Restrepo, C.** 2007. Body size patterns serve to fingerprint changes in bird communities in fragmented habitats. Department of Biology Seminar Series, University of Puerto Rico-Río Piedras, San Juan, Puerto Rico.
- Restrepo, C.** [speaker], H. Perotto-Baldviezo, M. Joseph-Haynes, M. Miller, and E. Castellanos. 2007. Landslides, land-cover change, and carbon dynamics in the Sierra de Las Minas, Guatemala. Symposium Mountain Landscapes - International Association of Landscape Ecology, Wageningen, The Netherlands.
- Restrepo, C.** 2006. Fragmentación de hábitat y multimodalidad en el tamaño corporal de ensambles de aves: un rompecabezas ecológico y un reto estadístico. Departamento de Biología, Universidad de Puerto Rico-Mayaguez, Mayaguez, Puerto Rico.
- Perotto-Baldviezo [speaker], M. Joseph-Haynes, and **C. Restrepo**. 2006. Landslides and the large-scale structure of tropical mountainscapes: Interactions with river networks and land-cover change in eastern Guatemala. First Symposium on Landslide Ecology, Association for Tropical Biology and Conservation, Kunming, China.
- Restrepo, C.** [speaker], H. Perotto-Baldviezo, M. Miller, M. Joseph-Haynes, and E. Castellanos. 2006. Large-scale dynamics of carbon mediated by landsliding in Sierra de Las Minas, Guatemala. First Symposium on Landslide Ecology, Association for Tropical Biology and Conservation, Kunming, China.
- Restrepo, C.** 2005. Ensamblajes de aves en hábitats fragmentados tropicales: Alometría, asimetría fluctuante y multimodalidad en tamaño corporal. Asociación Colombiana de Ciencias Biológicas, Cali, Colombia.
- Restrepo, C.** [speaker], M. Acevedo, and X. Sanchez. 2005. Large-scale Patterns of Species Diversity in the Island of Puerto Rico: The Integration of Large Databases with Explicit Spatial Information. Primer Simposio de Sistemas de Información Geográfica en Ecología Aplicada y Conservación. Universidad de Puerto Rico-RP, San Juan, Puerto Rico.
- Restrepo, C.** [speaker], A. Cuervo, and M. Ancaes. 2004. Bird assemblages in neotropical fragmented habitats: Multimodality in body size and complex allometries. Symposium Multimodality in Ecological Data: A Theoretical Puzzle and a Statistical Challenge. UPR-RP, San Juan, PR.

- Cuervo, A. [speaker] and **C. Restrepo**. 2004. Habitat fragmentation and fluctuating asymmetry in Andean birds. Symposium Multimodality in Ecological Data: A Theoretical Puzzle and a Statistical Challenge. UPR-RP. San Juan, PR.
- Delgado, J. [speaker] and **C. Restrepo**. 2004. Island size, species richness, and the distribution of body size in Caribbean Frogs. Symposium Multimodality in Ecological Data: A Theoretical Puzzle and a Statistical Challenge. UPR-RP, San Juan, PR.
- Restrepo, C.** [speaker], A. Cuervo, and M. Anciaes. 2004. Bird assemblages in neotropical fragmented habitats: Multimodality in body size and complex allometries. International Institute of Tropical Forestry, San Juan, Puerto Rico.
- Heredia, S. [speaker], E. Bruna, and **C. Restrepo**. 2003. Forest fragmentation and the spatial distribution of an ant-plant mutualism in Central Amazonia, ATB, Edinburgh, UK.
- Restrepo, C.** [speaker]. 2002. Landslides and land-cover change: Regional and global implications on the carbon cycle. Association for Tropical Biology. Panama City, Panama.
- Restrepo, C.**, B. T. Milne [speaker], D. Bader, W. Pockman, A. Allen, and A. J. Kerkhoff. 2001. Variation in vegetation growth rates: Implications for the evolution of semi-arid landscapes. International Association for Landscape Ecology-US, Tempe, AZ.
- Restrepo, C.** 2001. Forest edges and regeneration processes: Beyond edge effects. Association for Tropical Biology, Bangalore, India.
- Restrepo, C.** 2001. North American birds and butterflies: Evidence for multimodality in the distribution of geographical ranges. Workshop on Hierarchies and Scaling, San Fe Institute, NM.
- Restrepo, C.**, B. T. Milne [speaker], D. Bader, W. Pockman, A. P. Allen and A. J. Kerkhoff. 2001. Variation in Vegetation Growth Rates: Implications for the Evolution of Semi-arid Landscapes. International Association for Landscape Ecology-US, Tempe, AZ.
- Restrepo, C.**, M. Anand, A. Kerkhoff, B. T. Milne, A. Hurlebert, E. White, and P. Keil. 2000. Ecological Boundaries as Roughening Interfaces. Workshop on the Structure and Function of Boundaries, Institute of Ecosystem Studies, Millbrook, NY [poster].
- Restrepo, C.** [speaker], S. Sargent, D. Levey, and D. Watson. 2000. Vertebrates and the diversification of New World mistletoes. III International Symposium-workshop on Frugivores and Seed Dispersal: Biodiversity and Conservation Perspectives. Sao Pedro, Brazil.
- Milne, B. [speaker], **C. Restrepo**, and D. Kerkhoff. 1999. Multiscale assessment of structure and noise in species range maps. Ecological Society of America, Spokane, WA.
- Restrepo, C.** [speaker] and D. Kerkhoff. 1999. Bird-mediated seed dispersal and the organization of forest edges. Neotropical Ornithological Congress, New Perspectives in Plant-Animal Interactions, Monterrey, Mexico.
- Restrepo, C.** [speaker], L. M. Renjifo, and P. Marples. 1995. Lump structure of body mass in frugivorous birds in tropical fragmented ecosystems. Symposium Tropical Forest Remnants: Management and Conservation, Ecological Society of America Annual Meeting, Salt Lake City, UT.
- Levey, D. [speaker], **C. Restrepo** and C. Martínez del Río. 1993. The chemical ecology of fruit-frugivore interactions. Society for Chemical Ecology, Tampa, FL.
- Martínez del Río, C. [speaker] and **C. Restrepo**. 1991. Ecological and behavioral consequences of digestion in frugivorous animals. Second Symposium on Frugivory and Seed Dispersal, Los Tuxtlas, Mexico.

OTHER INVITED TALKS

- 2007 - Universidad del Valle, Ciudad de Guatemala
- 2006 - Colegio Frontera Sur - Chiapas, Chiapas, México. Universidad del Valle, Ciudad de Guatemala
- 2005 - Universidad del Valle, Ciudad de Guatemala, Guatemala; Fundación Ecoandina, Cali, Colombia.
- 2001 - University of California-Riverside, Department of Botany and Plant Sciences; University of Kansas, Department of EEB; University of Puerto Rico, Department of Biology; University of Washington, Department of Zoology.
- 2000 - University of Puerto Rico, Department of Biology; University of Mississippi, Department of Biology; SUNY at Stony Brook, Department of Ecology and Evolution.
- 1999 - Universidad de Antioquia, Medellín, Colombia; Tulane University, Department of Biology; University of Illinois, School of Integrative Biology; University of Cincinnati, Department of Biology; Texas A & M, Department of Wildlife; Boston University, Department of Biology; Florida Atlantic University, Department of Biology.

1996 - Universidad del Valle, Cali, Colombia.

CONTRIBUTED PAPERS

- Restrepo, C.** [speaker], E. Castellanos, G. Alfaro, C. Cifuentes, and G. LaQuay. 2013. Variation in soil organic carbon abundance and isotopic composition mediated by landslide activity in the Sierra de Las Minas, Guatemala. Association for Tropical Biology and Conservation, San José, Costa Rica, June 2013.
- Cifuentes, C., D. E. Mendieta, J. Vargas, C. García, and **C. Restrepo**. 2013. Development of biomass equations for small woody plants colonizing landslides in the Sierra de Las Minas of Guatemala. Association for Tropical Biology and Conservation, San José, Costa Rica, June 2013. [poster]
- Degaldo, D. [speaker] and **C. Restrepo**. 2012. Vine assemblages in tropical post-agricultural landscapes vary along complex environmental gradients. Association for Tropical Biology and Conservation, San José, Costa Rica, June 2013.
- McAdams, B. [speaker], A. Portier, S. Welch, **C. Restrepo**, and A. Carey. 2012. The origin of streambed sediments in a landslide dominated mountain range: Sierra de Las Minas, Guatemala. Geological Society of America Annual Meeting, Charlotte, NC, November 2012.
- Ramos-Scharron, C. [speaker] and **C. Restrepo**. 2012. The transfer of modern organic C by landslide activity in tropical montane ecosystems. EGU General Assembly, Vienna, Austria, April 2012.
- La Quay, G. and **C. Restrepo**. 2012. Landscape-level regeneration of landslides in the Sierra de Las Minas of Guatemala. Annual Meeting of the Association for Tropical Biology and Conservation, Bonito, Brazil, June 2012. [poster]
- Ramos-Scharron, C. [speaker] and **C. Restrepo**. 2012. The transfer of modern organic C by landslide activity in tropical montane ecosystems. European Geophysical Union General Assembly, Vienna, Austria, April 2012.
- McAdams, B. [speaker], S. A. Welch, **C. Restrepo**, A. Grottoli, Y. Matsui, and C. Carey. 2011. Dry season fluvial carbon dynamics related to landslides in the Sierra de Las Minas, Guatemala. Geological Society of America Annual Meeting, Minneapolis, MN, October 2011.
- LaQuay, G. and **C. Restrepo**. 2011. Variation in forest and landslide carbon pools along complex environmental gradients in the Sierra de Las Minas of eastern Guatemala. Annual Meeting of the Ecological Society of America, Austin, Texas, August 2011. [poster]
- Delgado, D., R. Arce-Nazario, and **C. Restrepo**. 2011. Understanding the large-scale pattern of exotic vine spread: Do power and telephone networks function as corridors aiding exotic vine invasion? Annual Meeting of the Ecological Society of America, Austin, Texas, August 2011.
- Delgado, D. [speaker] and **C. Restrepo**. 2011. Understanding the success of invasive vines: land use and its influence on the distribution of vine patches in a tropical landscape. Association for Tropical Biology and Conservation Annual Meeting, Tanzania, June 2011.
- Ramos-Scharron and **C. Restrepo**. 2010. The transfer of modern organic carbon by shallow landslide activity in a tropical montane ecosystem in Central America. Pan-American Advanced Studies Institute (PASI): Interdisciplinary Studies on Global Climate Change and the Ecology and Management of Tropical Montane Cloud Forests, Dominican Republic. [poster]
- Trierweiler, A. M., C. Mondro, **C. Restrepo**, and A. Carey [speaker]. 2010. Landslide disturbance and scale in watershed studies of fluvial carbon and nutrient yields. Geological Society of America Annual Meeting, November, 2010
- Trierweiler, A. M. [speaker], C. A. Mondro, S. A. Welch, **C. Restrepo**, and A. E. Carey. 2010. Carbon and nutrient export dynamics in small mountainous watersheds prone to landsliding. Goldschmidt Conference – Earth, Energy, and the Environment, Knoxville, Tennessee, June 2012.
- Restrepo, C.** [speaker], M. J. Gonzalez, and J. C. Castro. 2009. Landslides, natural protected areas, and the long-term management of mountainscapes: Emerging challenges from the study of the El Triunfo Biosphere Reserve, Chiapas, Mexico. Ecological Society of America Annual Meeting-OOS: Global Ecology in the 21st Century: Sustaining an Anthropogenic Biosphere, August, 2009.
- Restrepo, C.**, R. Arce-Nazario, M. Barreto, J. Colon, D. Delgado, E. Estela, J. C. Ortega, J. Ortiz, M. E. Perez, I. Quintero, R. Ríos, L. Santiago, and G. Toranzos. 2009. Legacies of Socio-economic transitions on the structure and function of a tropical drainage basin: Resilience and Sustainability Implications. First Millennium Conference of the Ecological Society of America – Water-Ecosystem Services, Drought, and Environmental Justice. Athens, Georgia, November 2010. [poster]
- Trierweiler, A. M., C. A. Mondro, S. A. Welch, **C. Restrepo**, and A. E. Carey. 2009. Carbon and nutrient export dynamics in small mountainous watersheds prone to landsliding. Geological Society of America Annual Meeting, Portland, OR, October 2009. [poster]

- Delgado, D. and **C. Restrepo**. 2008. Predicting the impacts of climate change on honeybee production in Puerto Rico. XXXI Congreso Interamericano de Ingeniería Sanitaria y Ambiental, Octubre 12-15 2008, Santiago de Chile, Chile. [poster]
- Villanueva, L., J. Delgado-Acevedo, M. I. Herrera, F. Castro, and **C. Restrepo**. 2007. Body size in neotropical amphibian communities and its role in predicting their conservation status. Association for Tropical Biology and Conservation, Morelia, Mexico. [poster]
- Delgado, D. [speaker], A. Galindo, and **C. Restrepo**. 2007. Landscape patterns of honeybee production in Puerto Rico in response to climate change. Association for Tropical Biology and Conservation, Morelia, Mexico.
- Muñoz, M., M. Caraballo, and **C. Restrepo**. 2007. Land-cover change and patterns of tree infection by the mistletoe *Dendropemon caribaeus* (Loranthaceae) in northern Puerto Rico. Association of Tropical Biology and Conservation, Morelia, Mexico. [poster]
- Ramos-Scharron, C., M. Miller, M. Joseph, and **C. Restrepo**. 2006. The role of shallow landslides in the downslope transfer of organic matter and its implications on the residence time of carbon in a tropical mountain system. American Geophysical Union, San Francisco, CA. [poster]
- Rodriguez, R. [speaker] and **C. Restrepo**. 2006. Land-use change and its impact on the butterflies of the "La Tula" watershed, Puerto Rico. Society for Conservation Biology Annual Meeting, San Jose, CA.
- Delgado-Acevedo, J. and **C. Restrepo**. 2006. Morphological variation in two *Eleutherodactylus* frogs in response to land-cover and land-use change in the northern karst region of Puerto Rico. Ecological Society of America, Knoxville, TN. [poster]
- Monmny, C. and **C. Restrepo**. 2006. Effect of habitat fragmentation on herbivore-parasitoid interactions: the role of body size. Gordon Research Conference-Metabolic Basis of Ecology, Maine. [poster]
- Restrepo, C.** [speaker], A. Cuervo, and M. Ancias. 2004. Bird assemblages in neotropical fragmented habitats: Multimodality in body size and complex allometries. IALE-US, Las Vegas, Nevada, US.
- Alvarez, N. [speaker] and **C. Restrepo**. 2004. Landslides and their impact on landcover change in the mountains of Central America: Consequences for local and regional carbon budgets. IALE-US, Las Vegas, Nevada, US.
- Cuervo, A. [speaker] and **C. Restrepo**. 2003. Responses of Andean birds to fragmentation: Fluctuating asymmetry as an indicator of stress. VII Congreso Ornitología Neotropical, Chile.
- Cuervo, A. [speaker] and **C. Restrepo**. 2003. Habitat fragmentation, fluctuating asymmetry, and neotropical montane birds. Conservation Biology, Duluth, MN.
- Restrepo, C.** [speaker], W. Pockman, B. T. Milne, A. Tyler, and A. Allen. 2002. Growth of two semi-arid plant species: The role of precipitation and potential evapotranspiration. Ecological Society of America, Tucson, AZ.
- Stark, C., N. Driscoll, J. Weissel, **C. Restrepo**, and N. Hovius. 2000. The role of biomass-wasting in the Carbon cycle. Goldschmidt Conference, Oxford, UK, September 2000.
- Stark, C., **C. Restrepo**, N. Hovius, J. Weissel, and N. Driscoll. 1999. The pivotal role of landsliding in montane forest ecosystems and its quantitative significance in regional and global carbon cycles. American Geophysical Union, San Francisco, CA. [poster]
- Restrepo, C.** [speaker], D. Kerkhoff, and B. Milne. 1999. Landslides and the large-scale organization of tropical montane ecosystems. International Association for Landscape Ecology, Aspen, CO.
- Restrepo, C.** [speaker] and A. Vargas. 1998. The influence of treefall gaps and anthropogenic edges on seed germination and seedling growth of two Neotropical shrubs. Association for Tropical Biology, Baltimore, MD.
- Restrepo, C.** [speaker] and P. Vitousek. 1998. Changes in species composition and above- and below-ground biomass in Hawaiian landslides. Ecological Society of America, Baltimore, MD.
- Restrepo, C.** [speaker]. 1997. Edge effects on fruit-frugivore interactions in a Neotropical montane forest. Ecological Society of America, Albuquerque, NM.
- Gómez, N. [speaker] and **C. Restrepo**. 1995. *Structure and seasonal fluctuations of the understory bird community of a cloud forest in SW Colombia*. Congreso de Ornitología Neotropical, Asunción, Paraguay.
- Restrepo, C.** [speaker] and N. Gómez. 1993. Edge effects on the understory bird assemblage of a tropical cloud forest. Association for Tropical Biology, San Juan, Puerto Rico.
- Restrepo, C.** [speaker], M. Mondragón, and W. Beltrán. 1990. Cooperative breeding in Toucan barbets (*Semnornis ramphastinus*), a Neotropical Frugivorous Bird. American Ornithologists' Union, Los Angeles, California.
- Restrepo, C.** and M. Mondragón. 1987. *Natural history of Semnornis ramphastinus, preliminary results*. Congreso de Ornitología Neotropical, Cali, Colombia. [poster]
- Restrepo, C.** and L. G. Naranjo [speaker]. 1987. *Changes in the distribution of aquatic ecosystems and birds in the Valle del Cauca, Colombia, between 1950-1980*. Congreso de Ornitología Neotropical, Cali, Colombia.
- Restrepo, C.** 1987. *Seed dispersal of mistletoes by birds*. Congreso Latinoamericano de Botánica, Medellín, Colombia.

CONTRIBUTED PAPERS - Puerto Rico

- Figueroa, J., D. Delgado y **C. Restrepo**. 2012. Characteristics of vine abundance in the Island of Puerto Rico. First Symposium of Undergraduate and Graduate Research, University of Puerto Rico-Rio Piedras, San Juan, PR, April 2012. [poster]
- Lopez, F. [speaker] and **C. Restrepo**. 2012. The application of dendrochronological techniques in tropical tree species. Puerto Rico Interdisciplinary Scientific Meeting, Carolina, Puerto Rico, March 2012.
- Figueroa, J. [speaker], D. Delgado y **C. Restrepo**. 2012. Características sobre la distribución y abundancia de enredaderas en Puerto Rico. Puerto Rico Interdisciplinary Scientific Meeting, Carolina, Puerto Rico, March 2012.
- La Quay, G. and **C. Restrepo**. 2012. Variation in forest and landslide carbon pools along complex environmental gradients in the Sierra de Las Minas of eastern Guatemala. Puerto Rico Interdisciplinary Scientific Meeting, Carolina, Puerto Rico, March 2012. [poster]
- Delgado, D. [speaker] and **C. Restrepo**. 2011. Role of land-use on patterns of exotic vine dispersal in a tropical watershed 10th Simposio Ambiental, Universidad de Puerto Rico- Cayey. October, 2011
- La Quay, G. [speaker] and **C. Restrepo**. 2011. Variation in plant composition and soil properties along complex environmental gradients in the Sierra de Las Minas, Guatemala. Puerto Rico Interdisciplinary Scientific Meeting, Bayamón, Puerto Rico, March 2011.
- Figueroa, J. M. [speaker], D. Delgado, and **C. Restrepo**. 2011. Características de éxito de introducción de enredaderas exóticas en una región tropical. Puerto Rico Interdisciplinary Scientific Meeting, Bayamón, Puerto Rico
- Delgado, D., R. Arce-Nazario, and **C. Restrepo**. 2011. Understanding exotic vine's large-scale spread through network analysis. Puerto Rico Interdisciplinary Scientific Meeting, Bayamón, Puerto Rico. [poster]
- Wagner, K., A. Odeh, M. Alejandro, G. Collazo, S. Ramos, A. Rivera, and **C. Restrepo**. 2011. Water and plastic bottles: Understanding key issues to develop sustainable initiatives in the College of Natural Sciences of UPR's Rio Piedras Campus. Puerto Rico Interdisciplinary Scientific Meeting, Bayamón, Puerto Rico. [poster]
- Delgado, D., R. Arce-Nazario, and **C. Restrepo**. 2010. Understanding the spread of exotic vines in Puerto Rico through network analysis. Puerto Rico Interdisciplinary Scientific Meeting, Mayaguez, Puerto Rico. [poster]
- Ramos, P. [speaker], J. Colon, and **C. Restrepo**. 2010. History of water development and human population change in the Río Grande de Arecibo Watershed. Puerto Rico Interdisciplinary Scientific Meeting, Mayaguez, Puerto Rico, March 2010.
- Colon, J. [speaker] and **C. Restrepo**. 2009. Socioeconomic, land-use and land-cover change as drivers of water quality regimen shifts in the Río Grande de Arecibo watershed. Puerto Rico Interdisciplinary Scientific Meeting, San Juan, Puerto Rico.
- Delgado, D. and **C. Restrepo**. 2009. Fluctuating asymmetry and morphological variation in Puerto Rican populations of Papilionidae butterflies Puerto Rico Interdisciplinary Scientific Meeting, San Juan, Puerto Rico. [poster]
- Fuentes, J. [speaker] and **C. Restrepo**. 2009. Host preferences by two species of Puerto Rican mistletoes. Puerto Rico Interdisciplinary Scientific Meeting, San Juan, Puerto Rico.
- Melendez, G. and **C. Restrepo**. 2009. Analysis of precipitation time-series for the Río Grande de Arecibo watershed: Implications for watershed management. Puerto Rico Interdisciplinary Scientific Meeting, San Juan, Puerto Rico.
- Delgado, D., A. Galindo, and **C. Restrepo**. 2007. Predicting the impact of climate change on honeybee production in Puerto Rico. Simposio Departamento de Recursos Naturales, San Juan, Puerto Rico. [poster]
- Delgado, D., A. Galindo, and **C. Restrepo**. 2007. Prediciendo los impactos de cambio de clima sobre la producción de miel en Puerto Rico. Primer Congreso Antillano de Apicultura, Guayanilla, Puerto Rico. [poster]
- Monmany, C. and **C. Restrepo**. 2007. Herbivore-parasitoid body sizes in the landscape Puerto Rico Interdisciplinary Scientific Meeting, Universidad Interamericana, Bayamon, Puerto Rico. [poster]
- Miller-Burgos, M. [speaker] and **C. Restrepo**. 2007. Causes of land-use change in the Sierra de Las Minas, Guatemala. Junior Technical Meeting, Universidad Interamericana, Bayaman, Puerto Rico.
- Delgado, D. [speaker], A. Galindo, and **C. Restrepo**. 2007. GIS as a tool for monitoring bee colonies and honeybee production in Puerto Rico. Puerto Rico Interdisciplinary Scientific Meeting. Universidad Interamericana, Bayamon, Puerto Rico.
- Orozco-Lopez, S. M., J. D. Daza, J. Delgado-Acevedo, E. Rosa-Molinar, and **C. Restrepo**. 2006. Land-use change, skeletal development, and abnormalities in two *Eleutherodactylus* frogs. Association for the Advancement of Science-Caribbean Chapter, Universidad Interamericana, Bayamon, Puerto Rico. [poster]

- Monmany, C. and **C. Restrepo**. 2006. Herbivore-parasitoid body sizes in the landscape. American Association for the Advancement of Science-Caribbean Chapter, Universidad Interamericana, Bayamon, Puerto Rico. [poster]
- Monmany, C. [speaker] and **C. Restrepo**. 2005. Lepidoptera body size as a determinant of parasitism patterns in the landscape. Segundo Simposio de Estudiantes Graduados de Biología, Universidad de Puerto Rico-RP, San Juan, Puerto Rico.
- Acevedo, M. [speaker] and **C. Restrepo**. 2005. Avian species distribution along a land-use mosaic: Puerto Rico as a case study. Simposio de la Flora y Fauna del Caribe, Universidad de Puerto Rico-Humacao, Humacao, Puerto Rico.
- Cuervo, A. [speaker] and **C. Restrepo**. 2003. La fragmentación de hábitat incrementa los niveles de asimetría fluctuante en aves tropicales de montaña. 1r Simposio de Estudiantes Graduados de Biología, San Juan, Puerto Rico. [poster]
- Delgado-Acevedo, J., N. Alvarez and **C. Restrepo**. 2003. Museum collections as useful resource for assessing patterns of diversity: Amphibians and the threatened karstic region of Puerto Rico. 1r Simposio de Estudiantes Graduados de Biología, San Juan, Puerto Rico. [poster]
- Heredia, S., E. Bruna and **C. Restrepo**. 2003. Fragmentation effects on the spatial distribution of the *Hirtella-Allomerus* mutualistic system in Central Amazonia. 1r Simposio de Estudiantes Graduados de Biología, San Juan, Puerto Rico. [poster]
- Rodríguez, R. and **C. Restrepo**. 2003. Diversidad de mariposas en la cuenca de la quebrada La Tula, Puerto Rico: Diversidad morfológica y heterogeneidad espacial. 1r Simposio de Estudiantes Graduados de Biología, San Juan, Puerto Rico. [poster]
- Delgado, J., N. Alvarez, and **C. Restrepo**. 2003. Museum collections as a useful conservation resource: Amphibian distribution patterns in the threatened karstic region of Puerto Rico, II Simposio de Investigación de la Zona Kárstica de Puerto Rico, Universidad Interamericana de Puerto Rico-Bayamón. [poster]
- Restrepo, C.** 2001. Landslides in tropical environments. USGS-Caribbean Program, Bayamón, Puerto Rico.

RESEARCH EXPERIENCE

- Coordinator of activities for the proposal “Scaling and Biodiversity: Physical and Biological Foundations of Ecological Principles” (J. Brown, PI) funded through NSF’s-Biocomplexity competition. 2000.
- Postdoctoral Research Fellow, LTREB: Portal (J. Brown, PI), The University of New Mexico, Albuquerque, NM 1999.
- Postdoctoral Research Fellow, Scale-dependent instabilities in the biophysical controls of landscape structure (B. Milne, PI), The University of New Mexico, Albuquerque, NM. 1999.
- Graduate Research Assistant, Mechanisms, processes, and patterns in species interactions: An experimental approach with tropical hummingbird-pollinated plants (P. Feinsinger, PI), University of Florida, Gainesville, FL. 1988.
- Field Assistant, *Inventory of critical areas for conservation in Colombia* (J. E. Orejuela, PI), WWF-USA and Fundación para la Educación Superior-FES, Colombia. 1982.
- Field Assistant, *Forest structure and composition of Ciudad Perdida, a prehispanic settlement in the Santa Marta mountains, Colombia*, Fundación Tayrona, Colombia. 1982.

TEACHING EXPERIENCE

- Instructor, Puerto Rican Winter Institute, Harvard University, Winter 2007.
- Instructor, GIS-Applications to Conservation. One day course Asociación Colombiana de Ciencias Biológicas, Cali, Colombia, Fall 2005.
- Instructor, Department of Biology, University of Puerto Rico-RP. Core Undergraduate Courses: Introductory Ecology (BIOL 3112), Introductory Ecology Lab (BIOL 3112). Advanced Undergraduate Courses: Evolutionary Medicine: Application of Evolutionary, Ecological, and Behavioral Concepts to the Study of Disease (BIOL 4999-43), Advanced Ecology: Basic Principles in Landscape Ecology (BIOL 4999-163). Core Graduate Courses: Advanced Ecology (BIOL 6190; coordinator and lecturer), Conservation Biology (BIOL 6145; lecturer), Evolution (BIOL 6802; lecturer), Doctoral Seminar - Scientific Writing (BIOL 8995). Advanced Graduate Courses: Large-Scale Ecology: Landscapes, Processes, and Diversity (BIOL 6127), Advanced Topics in Biology-Landscapes, Sustainability, and Resilience: Conceptual Basis, Methods, and Practice (BIOL 6990), Sustainability, resilience, and landscapes: Concepts, methods, and practice (BIOL 4999 and BIOL 6996). Graduate Seminars: Allometry, and Fluctuating Asymmetry (BIOL 6990) and Complex Systems (BIOL 6996). Fall 2001-Present.

Instructor, Seminar in Ecological Complexity. (Leading graduate seminar with J Brown). The University of New Mexico, NM. Spring 1999 and Fall 2000.
Instructor, *Temas en Ecología*, graduate course. University of Puerto Rico, San Juan, PR. Spring 2000
Instructor, *Tropical Ecology and Conservation: 96-2*, Organization for Tropical Studies, Costa Rica. 1996.
Graduate Teaching Assistant (undergraduate level), Introductory Biology for Majors-both labs (25 students) and discussion sections (70 students) (5 semesters), General Ecology (1 semester). University of Florida, FL. 1988-1995.
Graduate Teaching Assistant (graduate level), Community Ecology (1 semester), University of Florida, FL. 1990.
Instructor, *Tropical Ecology and Conservation*, Reserva Natural La Planada-FES, Colombia. 1991 and 1992.
Instructor, *Introduction to our birds*, Sociedad Vallecana de Ornitología, Colombia. 1984.
Undergraduate Teaching Assistant, Genetics (1 semester), Evolution (1 semester), Universidad del Valle, Colombia. 1980-1981

NATIONAL AND INTERNATIONAL WORKSHOPS AND SYMPOSIA ORGANIZED

Resilience and the Adaptive Management of Watersheds Workshop, University of Puerto Rico-Río Piedras, San Juan, Puerto Rico, February 2009. Organizer
Convening the First Symposium-Workshop on Landslide Ecology-A Perspective from Tropical Mountains, ATBC, Kunming, China, July 2006. Organizer
Multimodality in Ecological Data: A Theoretical Puzzle and a Statistical Challenge Symposium, University of Puerto Rico-Río Piedras, San Juan, Puerto Rico, March 2004. Organizer

SERVICE

UPR-RP, Search Committee (4 positions, Ecologist, Organismal Biologist, Population Geneticist, Systematist), 2013
Ecological Society of North America - Scaling UP - Future of Environmental Decisions Workshop - Planning Committee, 2013
UPR-RP, Personnel Committee. 2012.
UPR-RP, Search Committee Microbiologist, 2011.
UPR-RP, Search Committee Ecologist, 2010.
UPR-RP, Organizer Departmental Seminar Series, 2010.
UPR-RP, Academic Affairs Committee, 2008-2010.
UPR-RP, Chair, Search Committee Zoologist, 2007
UPR-RP, Search Committee Molecular Systematist, 2003.
UPR-RP, Department of Biology, Webmaster, Department of Biology web page, 2002-present.
UPR-RP, Department of Biology, Biology Strategic Planning Committee, 2002-2004.
UPR-RP, College of Natural Sciences, Nuevo Bachillerato Biology Committee: Math/Stat courses, 2002-2004.
UPR-RP, Department of Biology Graduate Committee, 2002-2004.
UPR-RP, College of Natural Sciences, Chair Library Committee-College, 2001-2003.
UPR-RP, Department of Biology Academic Affairs Committee, 2001-2002.
Association for Tropical Biology, Council Member, 2002-2003.
El Hornero, Subject Editor, 2001-present.
University of New Mexico, Search Committee Lecturer Human Anatomy and Physiology, 2000.
Moderator, contributed paper session: Cultural Perceptions and Perspectives of Landscapes, International Landscape Ecology Meeting, 1999.
Judge, Student Research Day, Department of Biology, The University of New Mexico, 1999.
Chair, Travel Award Committee, Association for Tropical Biology. 1998.
Mentor Women in Science and Engineering Program, University of New Mexico, NM. 1998.
Student Representative, Seminar Committee, Department of Zoology, University of Florida, FL. 1994-1995.
Editor, RUPICOLA, bimonthly newsletter of the Sociedad Vallecana de Ornitología, Colombia. 1983-1986.
Secretary, Sociedad Vallecana de Ornitología, Colombia. 1983-1986.
Secretary and Treasurer, Fundación Merenberg, Colombia. 1984-1985.

REVIEWER FOR

MANUSCRIPTS: American Journal of Botany, Animal Conservation, The Auk, Biological Conservation, Biotropica, Caldasia (Colombia), Caribbean Journal of Science, Community Ecology, Conservation Biology, Climatic Change, EcoScience, Ecology, Ecología (Bolivia), Ecological Applications, Ecological Complexity,

Ecosphere, El Hornero, Ecosystems, Forest Ecology and Management, Global Ecology and Biogeography, Journal of Ecology, Journal of Tropical Ecology, Landscape Ecology, Oecologia, Oikos, Ornitología Colombiana (Colombia), Restoration Ecology, Revista Chilena de Historia Natural, The Auk, Vegetation Science, Wilson Bulletin, plus four chapters for edited books.

PROPOSALS: National Science Foundation (reviewer and panelist), USDA-National Research Initiative Competitive Grants Program, Wildlife Conservation Society, Sigma-XI, National Geographic Society, NASA, Instituto Colombiano de Investigaciones Científicas-Colciencias, and Fundación para la Promoción de la Investigación y la Tecnología-Banco de la República, International Foundation Science.

SOCIETY MEMBERSHIPS

American Geophysical Union, American Ornithologists' Union, American Society of Naturalists, Association for Tropical Biology, Cooper Ornithological Society, Ecological Society of America, International Society for Landscape Ecology, Sigma Xi.

WORKSHOPS

Mountain Waters: Resource and Risk, Alliance for Global Sustainability, MIT, Boston, MA, November 2002.
Hierarchies and Scale, Santa Fe Institute, Santa Fe, NM, 2001.
Hierarchies and Scaling, National Center for Ecological Synthesis, Santa Barbara, CA. 2001.
Fractals in Biology, Santa Fe Institute, Santa Fe, NM. 2000.
Structure and Function of Boundaries in Ecological Mosaics Workshop, Institute of Ecosystem Studies, Millbrook, NY. 2000.
Scale Breaks in Organized Systems Workshop, Resilience Network, Cedar Key, FL. 1999.
Granular Materials: Statics, Excitations, and Dynamics Workshop, CAS, The University of New Mexico, Albuquerque, NM. 1998.
Development and Application of an Integrated Conceptual Framework to Guide Research on Agricultural Sustainability based on Complex System Theories Workshop. CIAT, Cali, Colombia. 1997

PROFESSIONAL TRAINING AND DEVELOPMENT

ERDAS IMAGINE – Spring 2010.
LIDAR Workshop - US Army Corps of Engineers, Puerto Rico - Fall 2007.
QEM/NSF Faculty Major Research Instrumentation Workshop, QEM Network, Washington, D. C.- Fall 2007.
5ta Conferencia de Usuarios GIS PR - Fall 2007.
QEM/NSF Faculty Career Development Workshop, QEM Network, Washington, D.C., January 2003.
Global Positioning Systems Workshop - ESA, Albuquerque, NM. 1997.
Arc-Info/GIS Introductory Course, ESRI, Charlotte, NC. 1996.
Organization for Tropical Studies, San José, Costa Rica, *Tropical Ecology and Conservation*: 88-2 course. 1988.

GRADUATE STUDENTS ADVISED

Zuania Colon. 2014. M.Sc. in Biology. University of Puerto Rico-Río Piedras, Puerto Rico (expected)
Diana Delgado. 2014. Ph. D. in Biology. University of Puerto Rico-Río Piedras, Puerto Rico (expected)
Johanna Colón. 2009. “Socioeconomic change as drivers of water quality regime shifts in the Río Grande de Arecibo Watershed.” B.Sc. Environmental Sciences, University of Puerto Rico-Río Piedras, Puerto Rico.
Rodney Rodriguez. “Land-use change and its impact on the butterflies of the "La Tula" watershed, Puerto Rico”. M.Sc. Biology, University of Puerto Rico-Río Piedras, Puerto Rico.
Andrés Cuervo. 2005. “Does Landscape Fragmentation Influence the Phenotype? Testing the Variation in Bilateral Asymmetry, Morphology, and Feather Growth Rates of Tropical Andean birds.
Johanna Delgado-Acevedo. 2005. Effects of Land-use Change on the Morphology of Puerto Rican Frogs. M.Sc. Biology, University of Puerto Rico-Río Piedras, Puerto Rico.
Zoraida Calle. 2002. “Fenología y Regeneración Natural del Arboloco *Montanoa quadrangularis* Sch. Bip. Asteraceae en una localidad de los Andes Septentrionales: Implicaciones para su Uso en al Restauración Ecológica de los Bosques Andinos. M.Sc. Biology, Universidad del Valle, Cali, Colombia.
Arlex Vargas. 1998. “La Influencia de Claros de Bosque y Bordes de Origen Antropogénico en la Germinación y Crecimiento de Semillas de dos Especies de Arbustos Neotropicales.” Departamento de Biología, Universidad de Antioquia, Medellín, Colombia.

POSTDOCS MENTORED

Humberto Perotto-Baldiviezo
Carlos Ramos-Scharron
Lindsey Sutton